

WHAT IS CLAIMED IS:

1. Apparatus, comprising:
 - a) a layer of dielectric;
 - b) a plurality of conductors;
 - c) a plurality of dielectric mounds, wherein each of the conductors is
5 encapsulated between the layer of dielectric and a corresponding one of the dielectric mounds; and
 - d) a first ground shield positioned below the layer of dielectric, and a second ground shield positioned above the dielectric mounds.
2. The apparatus of claim 1, wherein the second ground shield is deposited on the dielectric mounds.
3. The apparatus of claim 2, further comprising a plurality of conductive vias in the layer of dielectric; the conductive vias coupling the first and second ground shields at points about the plurality of conductors.
4. The apparatus of claim 3, further comprising a plurality of ground pads deposited on the layer of dielectric; the ground pads providing a means for coupling the second ground shield to the conductive vias.
5. The apparatus of claim 2, further comprising a plurality of ground traces deposited on the layer of dielectric; the ground traces providing a means for coupling the second ground shield to the conductive vias.

6. The apparatus of claim 1, wherein at least some of the dielectric mounds are separated from one another by a distance that is less than a width of one of the dielectric mounds.
7. The apparatus of claim 1, wherein at least some of the dielectric mounds are substantially adjacent one another.
8. The apparatus of claim 1, wherein the layer of dielectric and dielectric mounds are glass dielectrics.
9. The apparatus of claim 1, wherein the layer of dielectric and dielectric mounds are KQ dielectrics.
10. The apparatus of claim 9, wherein the KQ dielectrics are KQ CL-90-7858 dielectrics.
11. The apparatus of claim 1, wherein the layer of dielectric and dielectric mounds are thickfilm dielectrics.
12. The apparatus of claim 1, further comprising a substrate; the first ground shield being deposited on the substrate, and the layer of dielectric being deposited on the first ground shield.
13. The apparatus of claim 1, wherein the conductors and second ground shield comprise DuPont® QG150 gold.

14. The apparatus of claim 1, wherein the layer of dielectric, dielectric mounds, conductors, and second ground shield comprise thickfilms.

15. A method for forming transmission lines, comprising:

- a) depositing a plurality of conductors on a layer of dielectric that is positioned above a first ground shield;
- b) depositing a mound of dielectric over each conductor; and
- 5 c) depositing a second ground shield over the mounds of dielectric.

16. The method of claim 15, further comprising, prior to depositing the mounds of dielectric, forming a plurality of conductive vias in the layer of dielectric, at points about the plurality of conductors; the conductive vias contacting the first ground shield; wherein the mounds of dielectric and 5 second ground shield are deposited to ensure contact between the second ground shield and conductive vias.

17. The method of claim 16, further comprising, prior to depositing the mounds of dielectric, depositing a plurality of ground pads on the layer of dielectric; the ground pads contacting the conductive vias.

18. The method of claim 16, further comprising, prior to depositing the mounds of dielectric, depositing a plurality of ground traces on the layer of dielectric; the ground traces contacting the conductive vias.

19. The method of claim 15, wherein the layer of dielectric and mounds of dielectric are KQ dielectrics.
20. The method of claim 19, wherein each of the dielectrics is deposited by printing multiple layers of thickfilm dielectric and then firing the layers.